BRITISH COLUMBIA
The Best Place on Earth

BCStats

Infoline

Contact bcstats.infoline@gov.bc.ca

Issue: 08-04

January 25, 2008

- **Inflation rate relatively unchanged at 1.2% in December**
- **Retail sales edge 0.2% higher in November**
- **Poor weather to blame for 0.1% dip to Canada's leading composite index**

Prices

- **The province's year-over-year inflation rate remained relatively stable at 1.2% in December, down 0.1 percentage points from November.** British Columbians paid more for shelter (+2.4%) as consumers faced rising prices for homeowner insurance (+4.6%) and fuel oil (+23.7%). Energy prices were 2.7% higher in December, with much of that increase due to rising prices at the pump (+6.3%). Excluding energy, BC's inflation rate was at 1.0%.

  Consumers paid more for food (+1.3%) as grocery bills (+1.5%) became moderately more expensive. Transportation prices increased 1.2% as both private (+1.2%) and public (+1.4%) transportation options became more costly. The cost of household operations rose 1.6% while prices for household furniture (-6.8%), appliances (-1.8%) and equipment (-0.4%) continued to fall leaving the overall costs of running a household relatively flat (+0.1%). Alcohol & tobacco prices (+1.8%) were also up while health & personal care costs fell (-0.7%) for the second consecutive month.

  In Vancouver, inflation dipped slightly to 1.3% while in Victoria, consumers faced a more moderate increase in prices (+0.6%).

  Data Source: Statistics Canada

- **Nationally, a rise in gasoline prices (+14.9%) contributed greatly to the 2.4% increase in the all-items CPI between December 2006 and December 2007.** Excluding energy, the Canadian CPI rose only 1.7% over the past year. Canadians also faced higher cost for shelter (+4.0%), especially with respect to owned accommodation (+5.0%). The increase in shelter costs were primarily a result of higher mortgage interest and fuel-oil costs. On a provincial basis, inflation decelerated fastest in Alberta (-0.6 percentage points) where prices rose 4.1%, the lowest year-over-year inflation rate reported in Alberta since January. Meanwhile, the greatest price increase occurred in Manitoba where prices were up 2.0%, 0.3 percentage points higher than they were in November. *Data Source: Statistics Canada*

The Economy

- **Sales by British Columbian retailers inched up by 0.2% (*seasonally adjusted*) in November.** An increase in sales at BC's gasoline stations and general merchandise stores compensated for flagging retail activity at used and recreational vehicle dealers. Total Canadian sales were driven 0.7% higher by moderate gains made in Saskatchewan (+1.9%), Ontario (+1.0%) and Alberta (+0.8%). *Data Source: Statistics Canada*

- **Wholesale sales in the province rose 1.0% (*seasonally adjusted*) in November.** Strong sales in building supplies, lumber & millwork and computers & other electrical equipment explained much of the increase and served to offset a downturn in metal products, food and motor vehicles. Nationally, wholesalers saw a modest 0.3% increase in sales with gains made in BC and Ontario (+0.6%) counterbalancing declines in Quebec (-0.2%) and the Atlantic provinces (-0.2%). *Data Source: Statistics Canada*

- **Production at BC sawmills was 18.6% lower in November than in the same month of 2006 due to the continuing labour dispute.** Both Coastal (-19.9%) and Interior (-18.4%) mills posted large declines. Outside of BC, Canadian production was also down, as volume was off in most lum-

Report

It Ain't Easy Being Green: Why Biofuels May Not Be the Answer

Did you know...
Nearly two-thirds (64%) of British Columbians have either sent or received a love letter
Data Source: Ipsos Canada

ber-producing provinces.
Data Source: SC, Catalogue 35-003-XIE

- **The number of British Columbians receiving regular employment insurance (EI) benefits was 35,940 in November, 0.2% lower (*seasonally adjusted*) than the previous month.** All provinces with the exception of Prince Edward Island (+0.9%) and Newfoundland & Labrador (+0.4%) recorded a drop in the number of recipients. *Data Source: Statistics Canada*

2007 in Review

- **British Columbia's *annual* inflation rate was 1.8% in 2007, significantly lower than the national inflation rate of 2.2%.** Lower-than-average increases in the cost of shelter (+2.0%, compared to +3.4% nationally) and the price of gasoline (+3.8%, compared to 4.5% nationally) offset higher-than-average increases in the cost of recreation (+1.4, compared to +1.2% nationally) and health & personal care (+1.4%, compared to 1.3% nationally).

  Nationally, the cost of renting increased an average of 1.5% last year while rising only 1.2% here in BC. The price of electricity across Canada was, on average, 4.9% higher in 2007, yet just 0.2% more expensive here at home. However, while both British Columbians (-1.8%) specifically and Canadians (-6.5%) as a whole enjoyed a decrease in the price of natural gas, the decline was much more pronounced outside the province. Newfoundland & Labrador (+1.5%) and Quebec (+1.6%) reported the lowest inflation rates, while Saskatchewan (+2.8%) and Alberta (+5.0%) posted price increases well above the national average.

  Vancouver's inflation rate in 2007 was 2.0% while Victoria's prices increased an average of only 1.2%. *Data Source: Statistics Canada*

Agriculture

- **British Columbian farmers seem to be moving away from raising alternative livestock in 2006.** Between 2001 and 2006, out of 12 such species raised as livestock, 8 species were on the decline as a result of production problems or lack of market demand. The number of geese (+42%), bison (+41%), ducks (+9%) and llamas & alpacas (+6%) were on the rise in the province, while the number of emus & rheas (-62%), ostriches (-47%) and goats (-30%) being raised were all significantly lower and elk farming appears to have ceased altogether.
Data Source: SC, Catalogue 23-502-XIE

- **Once at the brink of extinction, the number of bison is on the rise in Canada, having grown 34.9% between 2001 and 2006.** Bison farming is an almost exclusively Western phenomenon as over 95% of Canada's 1,898 bison farms are located within Alberta (49.7%), Saskatchewan (29.3%), Manitoba (10.0%) and British Columbia (6.5%) with the rest in Ontario and regions further east. The Peace River region shared by British Columbia and Alberta is home to the largest concentrations of bison making up about 14.4% of the total bison population.
Data Source: SC, Catalogue 96-325-XIE

The Nation

- **Unseasonably warmer temperatures in BC and the rest of the Western provinces helped lead to a small decrease in natural gas sales.** On a year-over-year basis, Canadian sales of natural gas were down 0.5% in November. While increased industrial demand pushed sales 2.3% higher in that sector, residential (-3.6%) and commercial (-3.8%) sector sales drove total sales lower. *Data Source: Statistics Canada*

- **The nation's composite leading index slipped 0.1% in December after two consecutive months of no growth.** Much of the weakness can be blamed on unusually poor weather. Heavy snow storms cut into construction through the month of December driving the housing index down sharply in that month. Snow storms in Eastern Canada forced an abrupt decline in employment in the services sector despite recording 21 months of continuous increases. However, automotive sales were particularly weak and an apparent slowdown in the US economy, whose own leading indicator has fallen 0.2% in each of the past two months due to a lack of consumer confidence and a weak housing market, has resulted in fewer new orders for Canadian manufactured goods. *Data Source: SC, Catalogue 11-010-XWB*

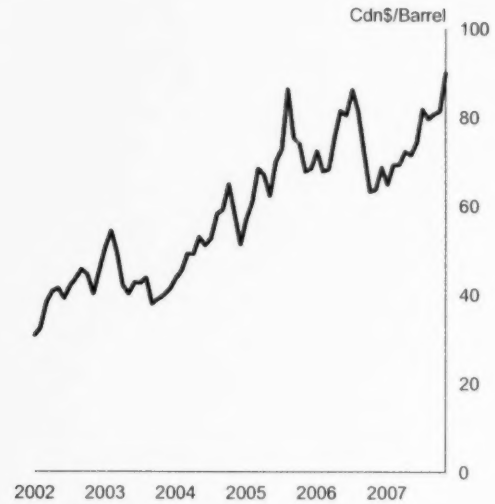
For data originating from Statistics Canada, data sourced to 'Statistics Canada' has been retrieved from CANSIM, the agency's electronic database; otherwise the source is identified as 'SC' plus the catalogue number.

Contact: Dan Schrier
(250) 387-0376
Originally published in
Envorinmental Statistics Issue 2008-1

It Ain't Easy Being Green: Why Biofuels May Not Be the Answer

The spiralling price of oil has encouraged the pursuit of alternative fuel sources and biofuels made from plant materials, including corn, sugar cane, rapeseed and so on, have become more popular not only as a way to break the dependence on oil, but also as a supposedly environmentally-friendly alternative to using fossil fuels.

The price of oil has been rising steadily over the last several years, making ethanol production more economical



Source: Natural Resources Canada

The theory behind the environmental benefits of biofuels is that the plants from which they are derived absorb the carbon dioxide that is causing global warming, plus they are a renewable fuel source and burn cleaner, producing fewer greenhouse gas emissions, compared to fossil fuels. Given the push toward "green" technologies and the apparent environmental benefits, biofuels have gained a great deal of popularity, particularly among governments. For instance, the United States government has targeted a 20% reduction in the use of gasoline in the next ten years through greater use of alternative fuels, such as ethanol. Governments in Canada are also promoting biofuels such as ethanol as an environmental solution. The problem that critics point to is that proponents of biofuels are only looking at a small part of the equation and are not taking into consideration the entire life cycle of the product.

To determine whether or not biofuels are truly a better alternative to gasoline, it is argued that one must examine the "costs" of biofuels from production through consumption. In other words, one has to look at things such as the energy used in growing the crops used to produce the biofuels, the emissions created from the growing process and so forth.

There has been a great deal of research performed regarding the efficiency of biofuels, particularly ethanol, and some of the results have been contradictory. Some studies have found that it actually takes more energy to produce ethanol than is subsequently available as fuel. Even in those studies where a positive energy balance was found, the net gain was at most about 30% (i.e., 1.3 units of energy produced for every unit expended). The type of plant material used makes a significant difference as well. Unfortunately, one of the least efficient inputs appears to be corn, which is the predominant base for biofuels in North America.

In addition to the doubt about validity of claims that ethanol and other biofuels conserve energy, there is also evidence to suggest that they may actually create more

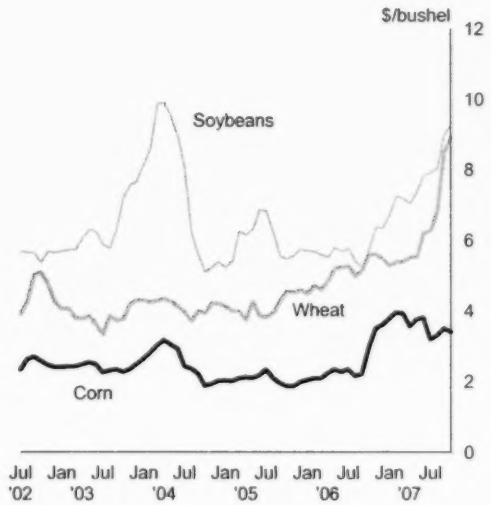
greenhouse gas emissions than they remove. A recent study claims that previous research has underestimated the impacts of fertilizer used in the production of the plant inputs for biofuels.

> When the extra [nitrous oxide] emission from biofuel production is calculated in "[carbon dioxide]-equivalent" global warming terms, and compared with the quasi-cooling effect of "saving" emissions of fossil fuel derived [carbon dioxide], the outcome is that the production of commonly used biofuels, such as biodiesel from rapeseed and bioethanol from corn (maize), can contribute as much or more to global warming by [nitrous oxide] emissions than cooling by fossil fuel savings.[1]

Put more simply, the fertilizers used in production of biofuels contribute as much or more to global warming as the amount saved by not using fossil fuels. The implications of this study are that biofuels are no better than using oil and are quite possibly even more detrimental to the environment. The study does suggest that some plants do offer more favourable conditions for biofuel production, including perennial grasses, ligno-cellulosic (i.e., wood) plants and oil palms. However, the cost of producing biofuels from these materials is currently much higher than is the cost of using corn or rapeseed and it is not yet economical to mass produce biofuels using these other materials. That leaves corn as the primary input for biofuel production in North America and, based on the evidence, many critics believe that corn-based ethanol is not an optimal substitute for fossil fuels and may even cause more environmental damage than those other fuels, at least when the corn is grown using current farming methods.

In addition to the disputed environmental effects, there is another serious problem in using corn and other crops as fuels. As the demand for corn for use in making ethanol has risen, so too has the price of corn, which in turn has affected the price of a wide variety of other food products, ranging from foods with corn ingredients, such as cereals and baked goods, to dairy and meat products derived from corn-fed animals. In addition, since corn is becoming a more lucrative crop, many farmers are switching their production away from crops such as soybeans and wheat and growing corn instead, which in turn is driving up the price of those other goods.[2]

The increase in corn production has moderated the increase in its price, but substitution of corn for other crops has driven up their prices



Source: US Department of Agriculture

[1] Crutzen, P.J., Mosier, A.R., Smith, K.A. and Winiwarter, W. "N2O release from agro-biofuel production negates global warming reduction by replacing fossil fuels," Atmospheric Chemistry and Physics Discussions, 7, 11191-11205, 2007.

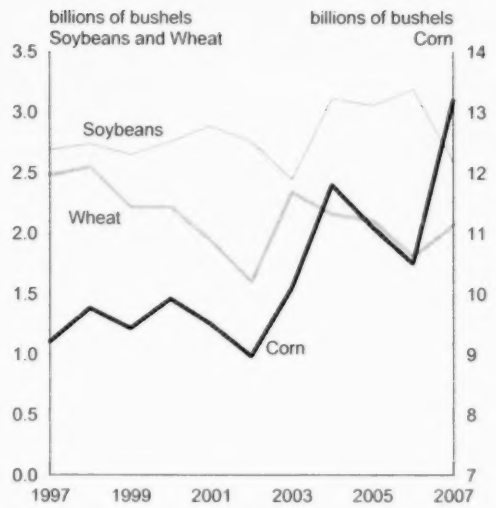
[2] The prices in the graph are as follows: corn, no. 2 yellow 30-day Chicago; soybeans, no. 1 yellow, 15-day Chicago; wheat, no. 1 HRW, Kansas City.

A recent report by Informa Economics disputes the notion that the rise in corn prices is a major factor in food price inflation, suggesting rather that other factors, such as the cost of labour, transport and packaging have a far more significant impact on food prices[3]. The report, prepared for the Renewable Fuels Foundation, an organization dedicated to research and planning for the US ethanol industry, looks at the relationship between corn prices and the overall food consumer price index (CPI) over time and finds that the relationship is weak. While this may indeed be true, and certainly the factors driving the price of food are complex, it does not necessarily follow that the recent jump in the price of corn or the shift to growing corn and away from other crops isn't affecting the price of food in general. It is likely that other factors are also affecting food prices, but the push for ethanol made from corn is probably a significant factor in shaping overall food prices.

Despite an almost 50% jump in corn production in the United States in just five years from 8.97 billion bushels in 2002 to 13.2 billion bushels in 2007, corn still experienced significant price inflation and the increased demand from the ethanol industry is a likely explanation for the rise in price. The effect on other crops can be seen in the drop in production levels. This is particularly evident in the slump in soybean production in 2007 at the same time that corn production saw a large jump.

At some point the higher prices for wheat and other crops will likely encourage farmers to shift production away from corn. However, if the demand for corn remains strong, the price will again rise for that good and production will shift back to corn, such that prices will continue to ratchet up in step with energy prices. In the meantime, the prices for other crops may reach a new plateau from which they may not fall anytime soon.

US production of corn has climbed significantly, while production of soybeans and wheat has been flat or falling



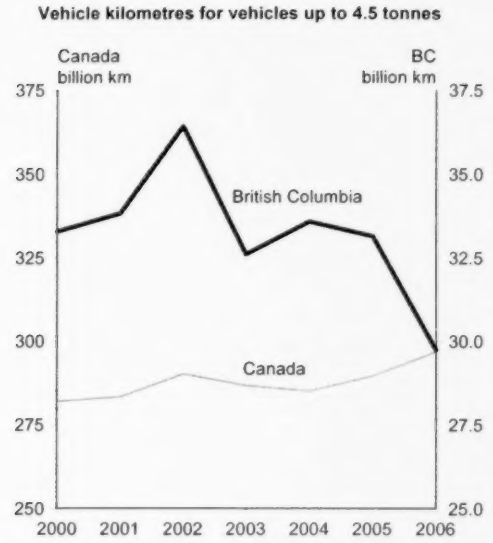
Source: US Department of Agriculture

The questions surrounding the environmental benefits of biofuels combined with the inflationary effect on food prices suggest that biofuels may not be the answer to our energy needs. At any rate, perhaps the emphasis should be placed less on finding alternative fuels and more on reducing consumption. The best way to reduce a vehicle's impact on the environment is to use it less. Drivers in British Columbia appear to be embracing this concept as vehicle use fell significantly in 2006; however, for Canada as a whole, the number of vehicle kilometres travelled continues to climb.[4] The decline in BC is despite the fact that the total number of vehicles in the province continues to increase, rising 10% from 2000 to 2006. For Canada, the increase was just over 11% over the same time period.

[3] Informa Economics, "Analysis of Potential Causes of Consumer Food Price Inflation," prepared for The Renewable Fuels Foundation, November 2007.

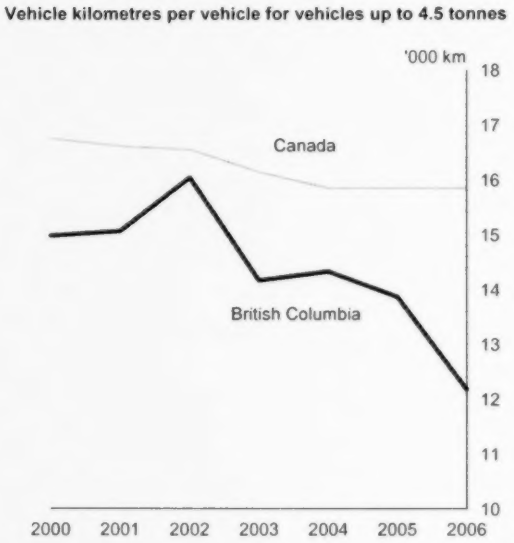
[4] Note that this is for vehicles up to 4.5 tonnes. Trucks exceeding 4.5 tonnes are excluded from the analysis.

Vehicle use fell significantly in BC in 2006, but continues to climb for Canada as a whole



Source: Statistics Canada, Canadian Vehicle Survey

British Columbians drive their cars less than the average Canadian



Source: Statistics Canada, Canadian Vehicle Survey

However, on a per vehicle basis, Canadians are driving their cars less, although British Columbians are still well ahead of the pack in terms of reducing average vehicle usage. Canadians reduced their average distance travelled per vehicle by just over 5% between 2000 and 2007, compared to an almost 19% reduction for drivers in British Columbia.

Given the uncertain environmental benefits and the impact on the food supply, organizations as diverse as the scientific community and economic organizations such as the OECD have levelled criticism at governments that promote the use of biofuels. Even if it becomes economical to produce biofuels using sources such as grasses and cellulose, which have less of an environmental impact in the production stage, the issue of food or fuel would still be a problem as land would be needed to grow those crops. One solution may be for governments to move away from policies promoting the use of biofuels and toward programs that will help reduce overall vehicle usage, such as better transit or urban growth strategies that promote living closer to work. Based on the scientific evidence, the environmental benefits of those types of policies are almost certain to exceed those related to biofuels.

Infoline

January 25, 2008
Issue 08-04

Email transmission information service from BC Stats

also on the **Internet** at www.bcstats.gov.bc.ca

BC at a glance . . .

POPULATION (thousands)	Oct 1/07	% change on one year ago
BC	4,402.9	1.5
Canada	33,091.2	1.0
GDP and INCOME (Revised Nov 8)		% change on
(BC - at market prices)	2006	one year ago
Gross Domestic Product (GDP) *($ millions)*	180,328	6.4
GDP *($ 2002 millions)*	158,335	3.3
GDP *($ 2002 per Capita)*	36,649	1.9
Personal Disposable Income *($ 1997 per Capita)*	23,996	5.0
TRADE ($ millions, seasonally adjusted)		% change on prev. month
Manufacturing Shipments - Nov	3,482	-1.8
Merchandise Exports - Nov	2,510	3.9
Retail Sales - Nov	4,762	0.2
CONSUMER PRICE INDEX	% change on	12-month avg
(all items - Dec 2007)	one year ago	% change
BC	1.2	Annual 1.8
Vancouver	1.3	average 2.0
Victoria	0.6	from 1.2
Canada	2.4	Stats Can 2.2
LABOUR FORCE (thousands)		% change on
(seasonally adjusted)	Dec '07	prev. month
Labour Force - BC	2,392	-0.3
Employed - BC	2,291	-0.3
Unemployed - BC	100	0.0
		Nov '07
Unemployment Rate - BC *(percent)*	4.2	4.2
Unemployment Rate - Canada *(percent)*	5.9	5.9
INTEREST RATES (percent)	Jan 23/08	Jan 24/07
Prime Business Rate	5.75	6.00
Conventional Mortgages - 1 year	7.35	6.50
- 5 year	7.49	6.65
US-CANADA EXCHANGE RATE	Jan 23/08	Jan 24/07
(avg. noon spot rate) Cdn $ per US $	1.0286	1.1824
(closing rate) US $ per Cdn $	0.9769	0.8482
AVERAGE WEEKLY WAGE RATE		% change on
(industrial aggregate - dollars)	Dec '07	one year ago
BC	755.66	2.2
Canada	766.72	4.9

SOURCES:

Population, Gross Domestic Product, Trade, Prices, Labour Force, Wage Rate } Statistics Canada

Interest Rates, Exchange Rates: Bank of Canada Weekly Financial Statistics

For latest Weekly Financial Statistics see www.bankofcanada.ca

High Technology - 2007

Input Indicators of the British Columbia High Technology Sector - 2007 Edition

This publication highlights conditions affecting the province's high technology sector from a supply-side perspective by tracking 37 business and economic climate indicators for BC, with comparisons to other provinces.

www.bcstats.gov.bc.ca/data/bus_stat/busind/hi_tech.asp#HTpubs

Topic Tables – 2006 Census

What are the top languages spoken at home in your community? Where were a community's immigrants born? A different approach to census tabulations.

www.bcstats.gov.bc.ca/data/cen06/topics/topics.asp

2007 Municipal Populations

Total population for municipalities and Regional Districts for July 1, 2007, as well as revised figures for 2002 to 2006, are now online.

www.bcstats.gov.bc.ca/data/pop/pop/estspop.asp

Area Profiles

There is a new link in the **RESOURCES** tab found at the bottom of our left sidebar. This page acts as a gateway to all our area profile products. Each profile paints a statistical picture of an area using maps, charts, tables, rankings, comparisons, and more. More than eight thousand individual files are available now. Check it out!

www.bcstats.gov.bc.ca/data/dd/profiles.asp

Released this week by BC Stats

- Consumer Price Index, December 2006

• Next week

- Business Indicators, January 2008
- Current Statistics, January 2008

BC Stats, Ministry of Labour and Citizens' Services, Box 9410 Stn Prov Govt, Victoria, B.C. V8W 9V1
Tel: (250) 387-0327 Fax: (250) 387-0329 Web: www.bcstats.gov.bc.ca E-mail: BC.Stats@gov.bc.ca